

# **OPERATOR'S MANUAL**

OM-E18-352



This manual  
contains correct  
information  
regarding lubrication,  
operation, main-  
tenance, assembly,  
and parts

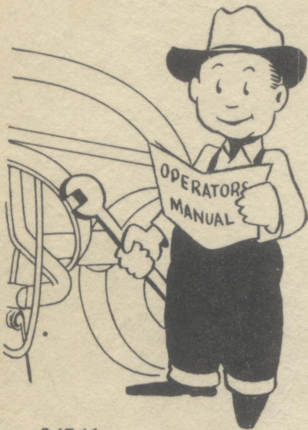


## **JOHN DEERE Semi-Integral SIDE DELIVERY RAKE No. 851**

For the best service see your  
**JOHN DEERE DEALER**  
Use Only Genuine John Deere Parts

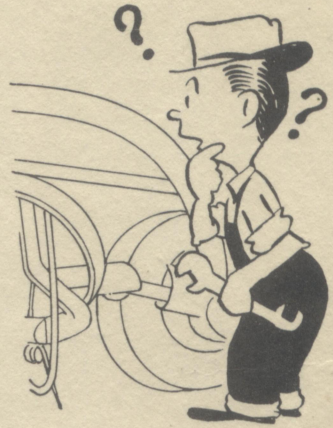


# INTRODUCTION



24741

There is a  
**RIGHT WAY**  
←  
and a  
**WRONG WAY**  
→  
to do  
*everything*



24740

That is the reason we ask you to keep this manual in a handy place to be used as a guide whenever any questions arise about operating and servicing your new John Deere No. 851 Semi-Integral Side Delivery Rake the **RIGHT WAY**. You have purchased a dependable machine, but only by proper care and operation can you expect to receive the service and long life designed and built into it.

If you need additional information, or if your rake requires special servicing, see your John Deere dealer—he has all the facilities required to keep your rake in A-1 condition. He will be glad to serve you.

Sometime in the future, your rake may need new parts to replace worn or broken parts, or for emergency repair. If so, go to your John Deere dealer. He will see that you get high-quality, genuine John Deere parts. When ordering, be sure to give him the correct part number and description of the part desired. Such information can be obtained from the parts list section of this manual. Also provide your dealer with the model number of your Side Rake, and year purchased. This information will help him to identify the part you need. Record this information for ready reference in the space at the bottom of this page.

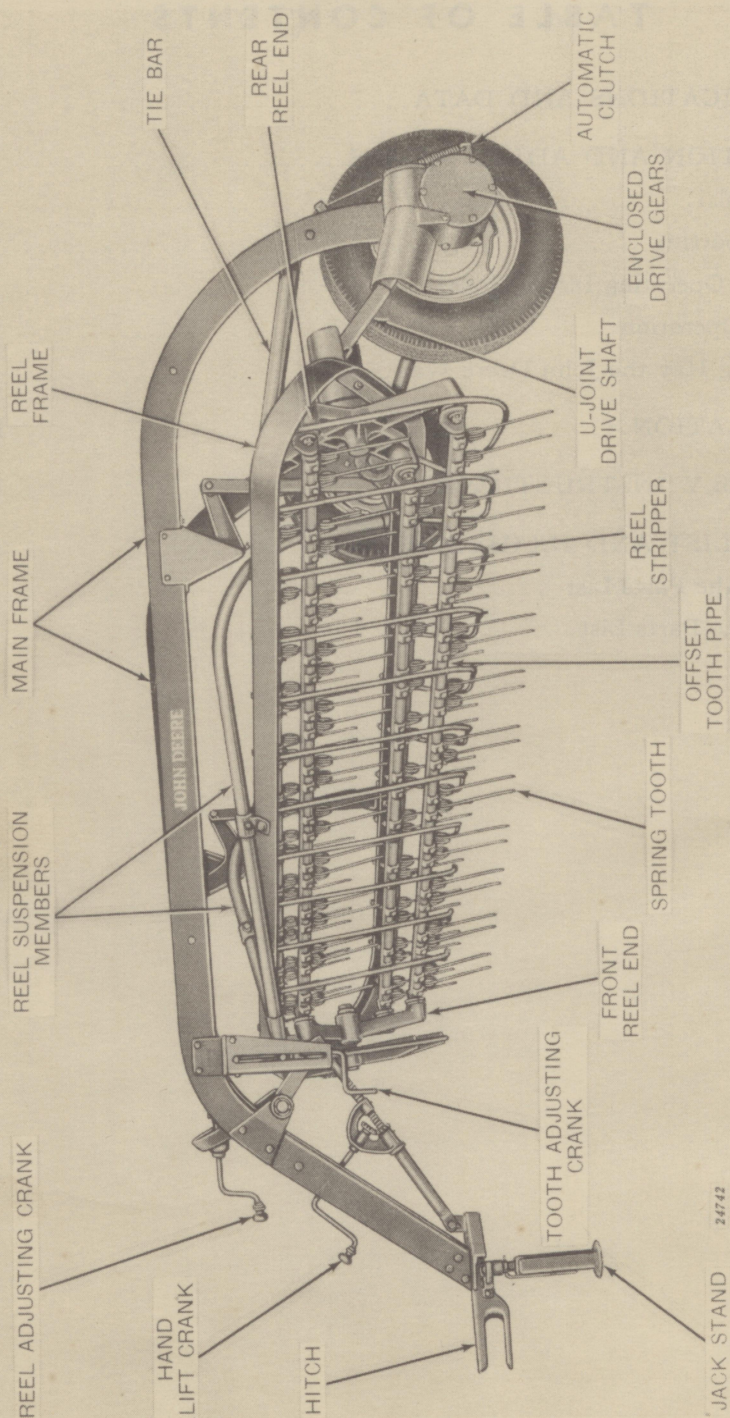
Date Purchased.....  
Model No..... Year.....



## TABLE OF CONTENTS

	<i>Page</i>
SPECIFICATIONS AND DATA.....	2-3
OPERATION AND ADJUSTMENTS.....	4-9
Controls.....	4-5
Transporting.....	5
Before Operating Instructions.....	6-7
Field Operation.....	8
Making Hay the John Deere Way.....	9
LUBRICATION.....	10-11
ASSEMBLY INSTRUCTIONS.....	12-20
PARTS LIST AND ILLUSTRATIONS.....	21-41
Using the Parts List.....	21
Index to Parts List.....	22





*John Deere No. 851 Semi-Integral Side Delivery Rake*



## SPECIFICATIONS AND DATA

Over-All Width of Rake.....	9 Ft. 11 In.
Over-All Length of Rake.....	11 Ft. 6 In.
Length of Reel.....	10 Ft. 10 In.
Number of Tooth Bars.....	4
Number of Teeth.....	88
Tread Width.....	6 Ft. 2 In.
Size of Pneumatic Tires.....	5.90x15—4-Ply
Tire Pressure.....	20 Lbs.
Width of Swath.....	7 Ft.
Operating Speed.....	3 to 7 Miles per Hour
Bearings.....	Reel—Sealed Ball Bearings Gear Box—Tapered Roller Bearings Others—Oil Impregnated Bronze Bearings
Weight of Rake.....	Approximately 1025 Lbs.

NOTE: Right-hand and left-hand sides are determined by facing in  
the direction the machine will travel when in use.

(It is John Deere policy to improve our machines at every opportunity. Consequently,  
it may be necessary to change design without notice.)



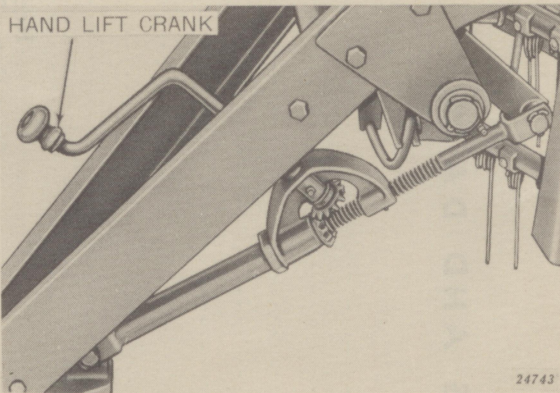
## OPERATION AND ADJUSTMENTS

### CONTROLS

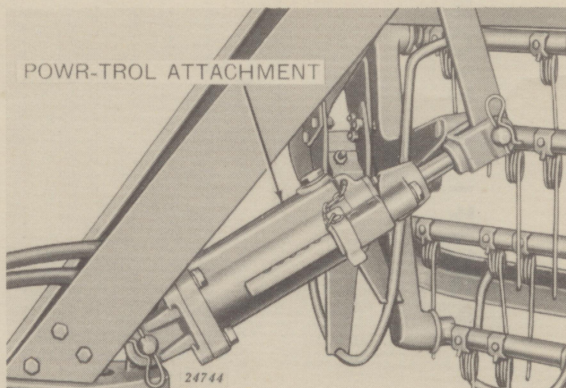
The controls necessary for operation of your John Deere No. 851 Semi-Integral Side Delivery Rake are listed below. Before operating your machine study the controls and make adjustments as shown on Pages 6-7. Then read field operations so you will fully understand your machine.

#### HAND LIFT CRANK.

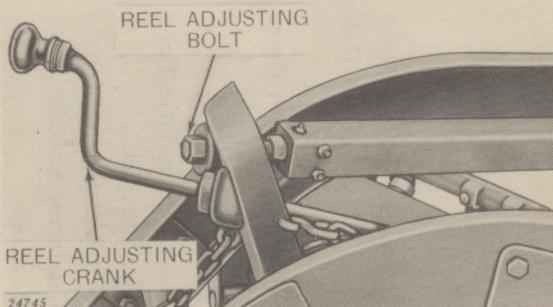
The hand lift crank lowers the reel into operating positions or raises the reel for transporting. Turn the crank clockwise to raise the reel, counter-clockwise to lower the reel.



**POWR-TROL ATTACHMENT.** Instead of the hand lift crank the rake can be equipped for hydraulic operation with John Deere Powr-Trol or the hydraulic system of any tractor having sufficient capacity and utilizing a remote cylinder that conforms with A.S.A.E.-S.A.E. standards.

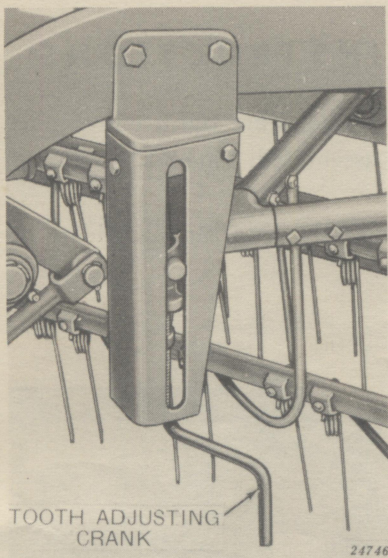


**REEL ADJUSTING CRANK.** The reel adjusting crank raises and lowers the left end of the reel.

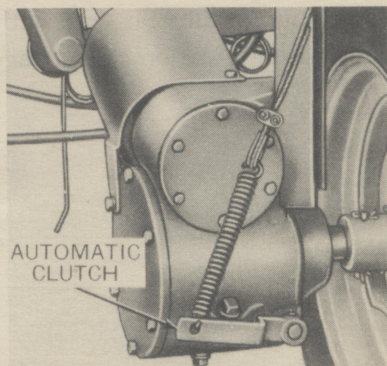


**REEL ADJUSTING BOLT.** The reel adjusting bolt raises and lowers the right end of the reel.

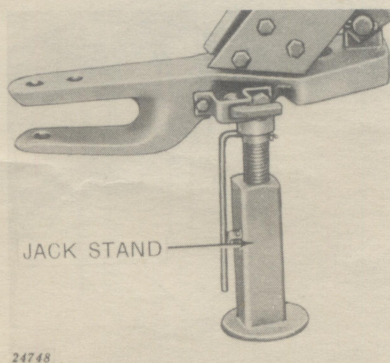




**TOOTH ADJUSTING CRANK.** The tooth adjusting crank controls the pitch of the spring teeth in relation to the surface of the ground.



**AUTOMATIC CLUTCH.** The automatic clutch, controlled by a cable from the lift alignment plate, disengages the reel when the reel is raised to transporting position.



**JACK STAND.** The jack stand supports the rake when not attached to the tractor.

## TRANSPORTING

After connecting rake to tractor, to raise jack stand pull out the spring loaded pin. Release pin to hold in place.

When transporting the rake, raise the reel with hand lift crank or Powr-Trol to throw rake out of gear and prevent damage to teeth.

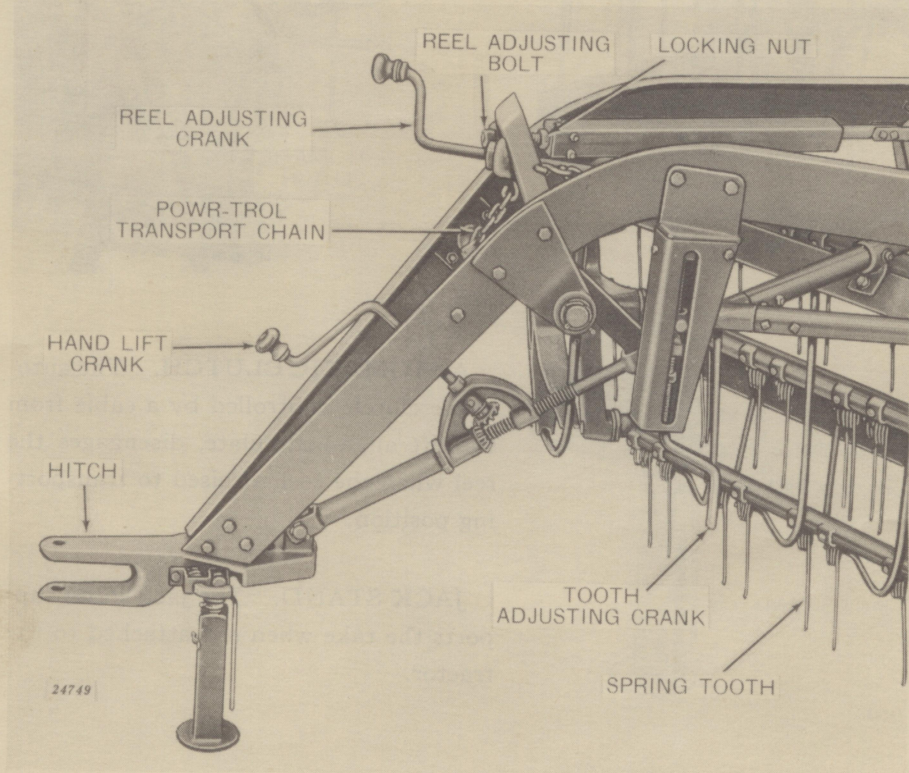
Fasten Powr-Trol transport chain before removing Powr-Trol from the rake. Before disconnecting rake from tractor lower the jack stand.



## BEFORE OPERATING INSTRUCTIONS

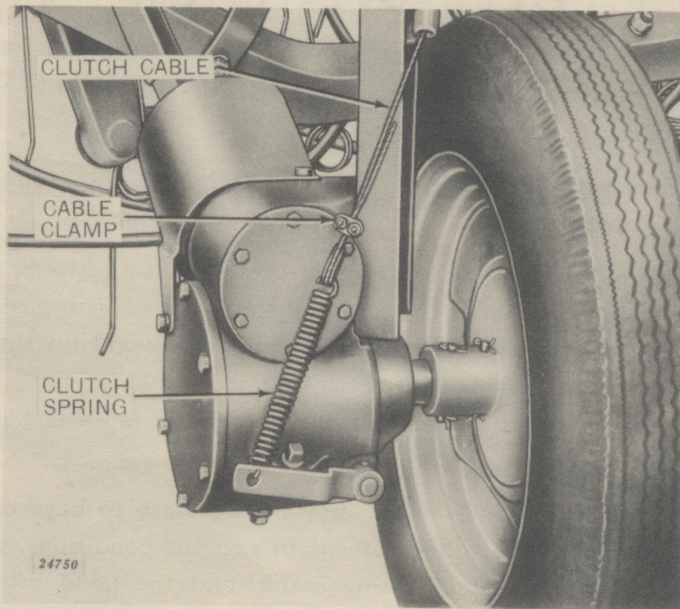
Before starting the rake, make sure that all bolts are tight, cotter pins are spread, and machine has been properly assembled, Pages 12 to 20.

Be sure to fill gear case with the proper grade of oil and lubricate as shown in lubrication chart, Pages 10 and 11.



Make the following adjustments with the hitch set at drawbar height (12 to 15 inches). Release the Powr-Trol transport chain and lower the reel as far as possible either with the hand lift crank or Powr-Trol. With the reel in this position be sure the teeth on the right end of the reel clear the ground approximately one inch. If not, loosen the locking nut and adjust the reel adjusting bolt until the teeth on the right end of the reel have the proper ground clearance. Tighten the locking nut. With the reel adjusting crank raise or lower the left end of the reel to the same one-inch clearance.





The automatic clutch disengages the reel when the reel is in its highest position. To adjust the clutch cable, raise the reel, loosen the cable clamp and extend the clutch spring one inch by pulling the cable tight. Tighten clamp. Return the reel to the normal operating position.

When starting a new side rake, turn the reel by hand to be sure it revolves freely and the teeth do not strike the strippers. Then put the rake in gear by lowering the reel, jack up the rake and turn the wheels by hand to see that the tooth pipes and gears run free. Breakage of parts, which causes serious delay and additional expense, can be avoided by taking these precautions before entering the field.

An occasional thorough inspection for loose nuts, and worn parts will add to the efficiency of your rake.



## FIELD OPERATION

Side-delivery rakes, once they are adjusted to suit field conditions, are easy to operate. The operator simply drives the tractor and lubricates the machine when necessary.

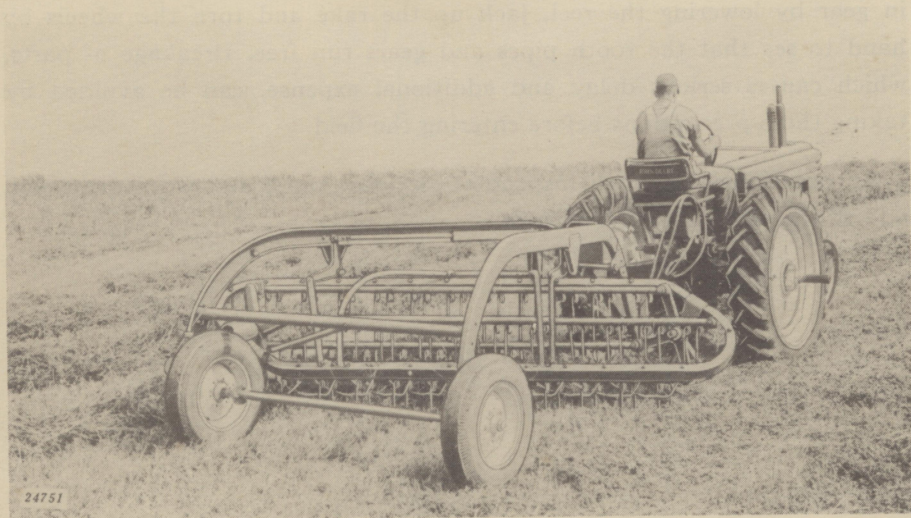
Set the reel with the teeth as far as possible from the ground, but so the teeth will pick up clean.

Under average conditions the normal position for the tooth adjusting crank is with the knuckle in the center of the tooth adjusting crank housing. Raising the suspension members with the crank will tilt the reel and increase the forward angle of the teeth to produce a loose, fluffy windrow. Lowering the suspension members will decrease the tooth angle and produce a tighter windrow.

Under certain field conditions it may be necessary to have one end of the reel higher than the other. Except in extreme conditions, make this adjustment with the reel adjusting crank, and the hand lift crank or Powr-Trol.

To raise the left end of the reel higher than the right end, use the reel adjusting crank. To raise the right end higher than the left, lower the left end with the reel adjusting crank and raise the complete reel with the hand lift crank or Powr-Trol.

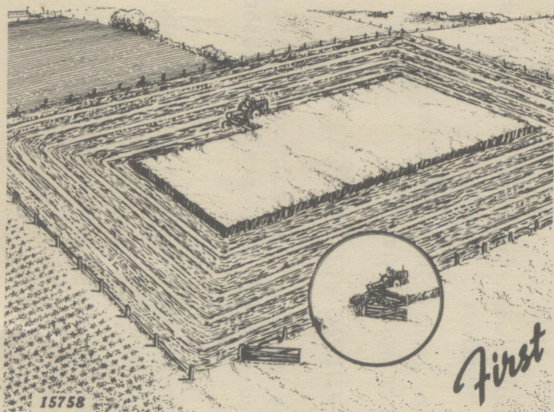
When the right end of the reel must be raised considerably higher than the left, raise the right end with the reel adjusting bolt.



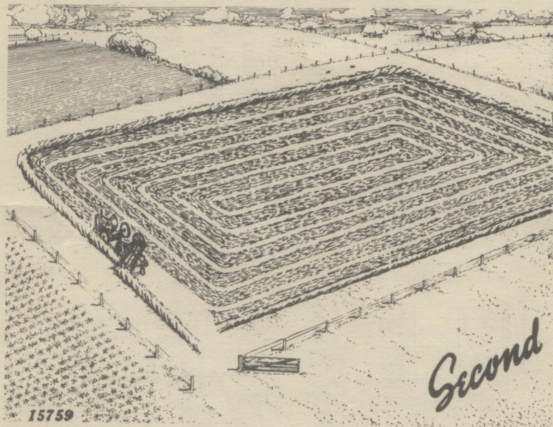


## MAKING HAY THE JOHN DEERE WAY

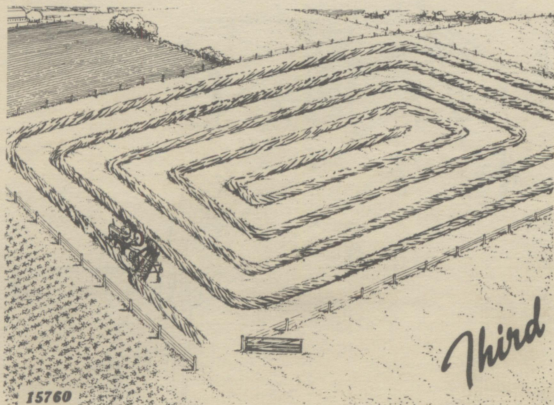
For proper method of cutting and side raking hay the John Deere Way, see illustrations below.



In mowing, enter the field as shown in the inset, making one round to cut hay along the fence. Reverse direction of travel and continue around the field making right-hand turns until the entire field is cut.



Drive the John Deere Side Delivery Rake in the same direction the mower traveled. Working against the heads of the plants, the John Deere places the majority of the leaves inside the windrow. The leaves, shaded from the direct rays of the sun by the stems, are cured rapidly by the free circulation of air.



To hasten curing of especially heavy crops, or to preserve the quality of hay dampened by a shower, turn the windrow upside down by simply driving alongside the windrow with the left rake wheel just at the edge of the hay. This causes the windrow to be placed with the dry side down on dry stubble.



## SYMBOLS



Grease every four hours of operation.



Oil every four hours of operation.

## LUBRICATING INSTRUCTIONS

The economical and efficient operation of any machine is dependent upon regular and proper lubrication of all moving parts with a quality lubricant. Greasing is just as vital to the service life of farm machinery as is the use of proper lubricating oil in the crankcase of an automobile or tractor. Neglect leads to reduced efficiency, heavy draft, wear, breakdown, and needless replacement of parts.

**IMPORTANT:** Before operating machine, check oil in gear box. See Note No. 1.

**CAUTION:** Do not clean, lubricate, or adjust your machine while it is in motion.

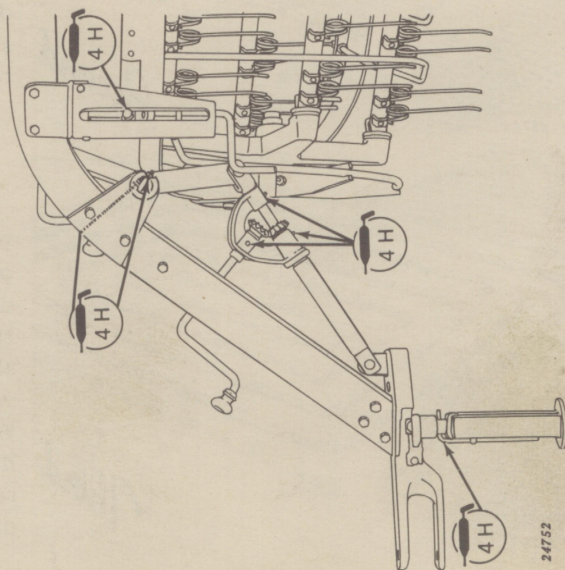
**FITTINGS:** Clean grease fittings before using grease gun. Replace any lost fittings immediately.

## LUBRICATION NOTES

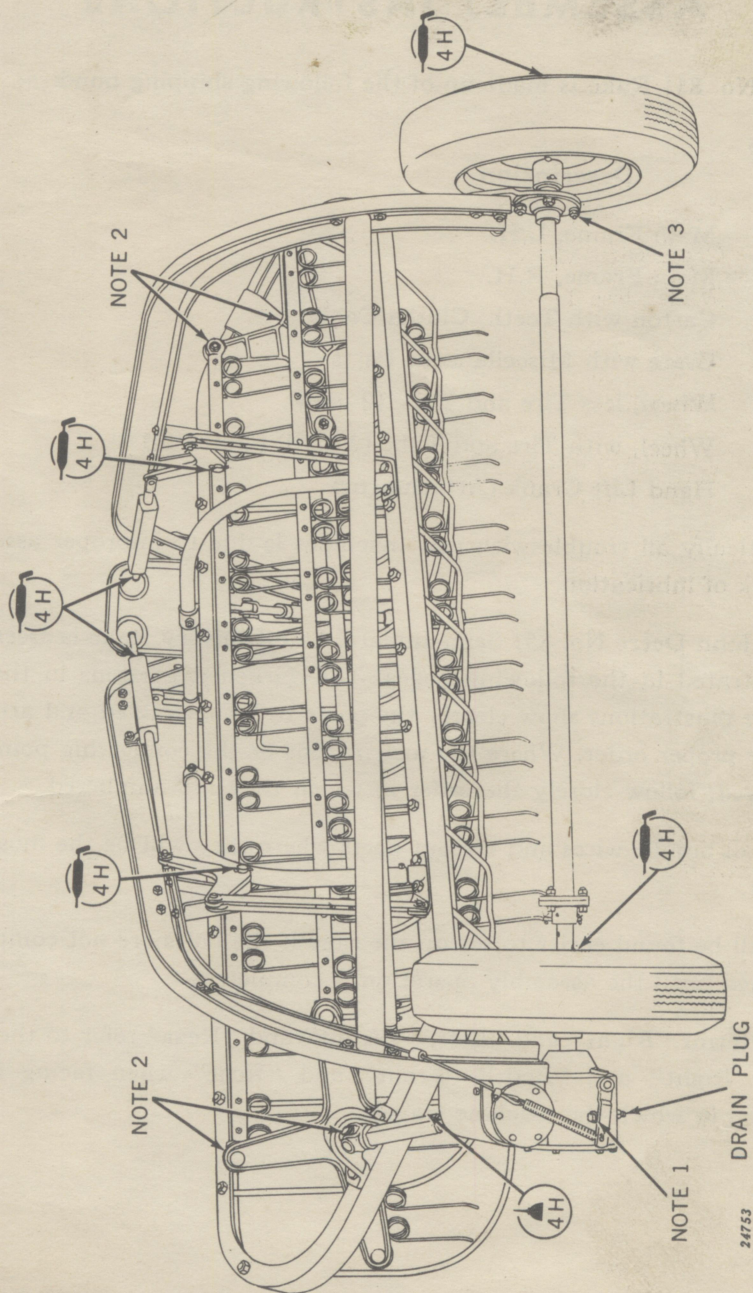
Note No. 1. Check level of oil in gear case every day. Fill to plug level. Drain, flush out and refill once each season. Use S.A.E. 140 transmission oil.

Note No. 2. Reel bearings, sealed at factory, are permanently lubricated. Repack if disassembled.

Note No. 3. Axle self-aligning bearings are permanently grease-sealed. No lubrication necessary.









## ASSEMBLY INSTRUCTIONS

The No. 851 Rake is made up of the following shipping bundles:

<b>Bundle No.</b>	<b>Description</b>
357 E	Main Frame, L.H.
358 E	Main Frame, R.H.
359 E	Carton with Teeth, Clutch Cable
360 E	Crate with Miscellaneous Parts
361 E	Wheel, less Tire and Tube (2 used)
364 E	Wheel, with Tire and Tube (2 used) (Optional)
365 E	Hand Lift Crank (Attachment)

Practically all trouble with new machines is due to improper assembly and lack of lubrication.

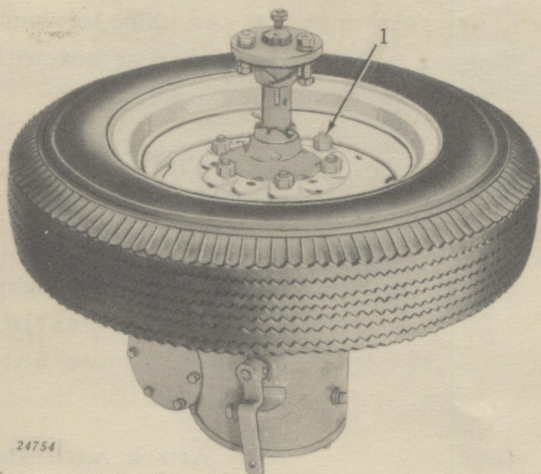
The John Deere No. 851 Semi-Integral Side-Delivery Rake is assembled as illustrated in the following pages. The darkened portions in the progressive illustrations show clearly the parts to be assembled and attached in their proper order. Where the instructions or the connecting points are numbered, follow closely the order in which they are numbered.

Cut all bundle wires and lay out parts where they will be the most convenient.

It will be found easier to set up the rake if the bolts are not completely tightened until the assembly operation is completed.

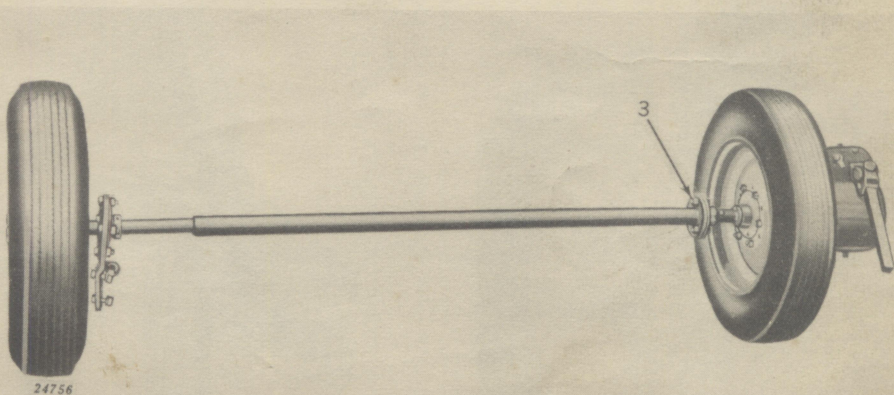
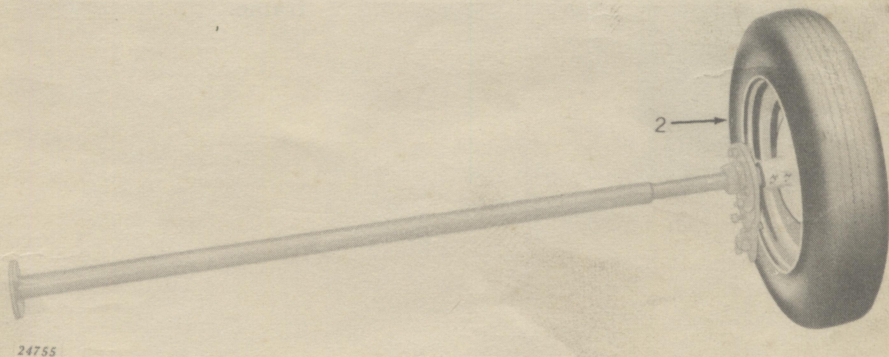
The terms "Right" and "Left," "Front" and "Rear" refer to the operator's "Right" and "Left," "Front" and "Rear" when facing in the direction in which the machine travels.





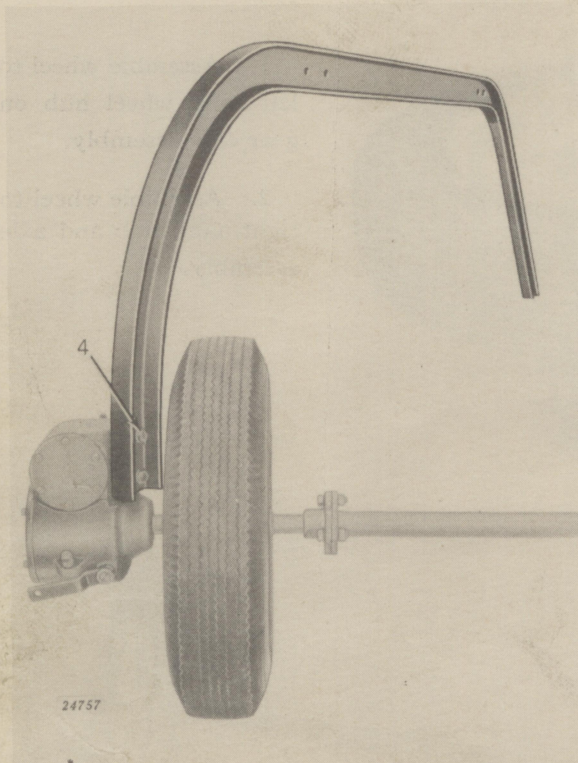
1. Assemble wheel to left-hand wheel hub on gear case assembly.

2. Assemble wheel to right-hand hub and axle assembly.



3. Attach right-hand wheel and axle assembly to left-hand wheel and gear case assembly.



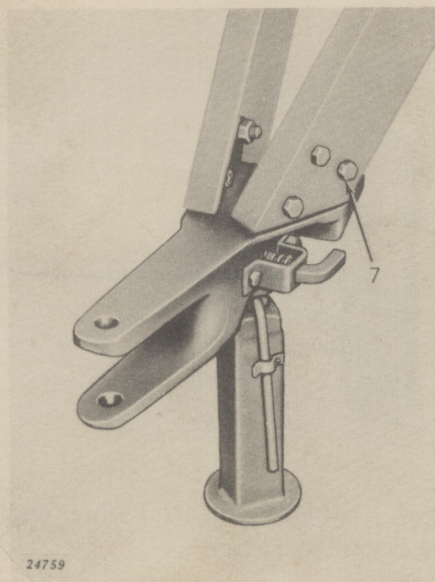
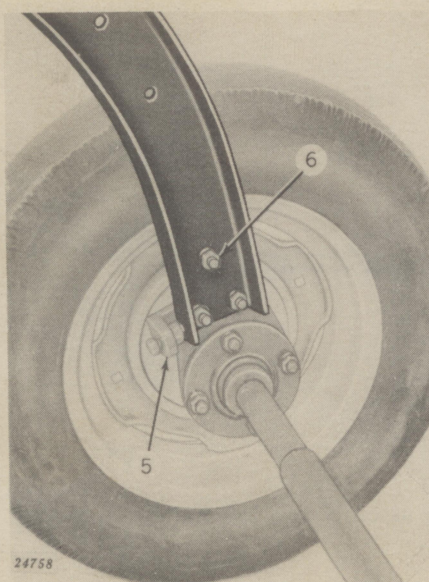


4. Assemble left-hand frame to gear box with four cap screws.

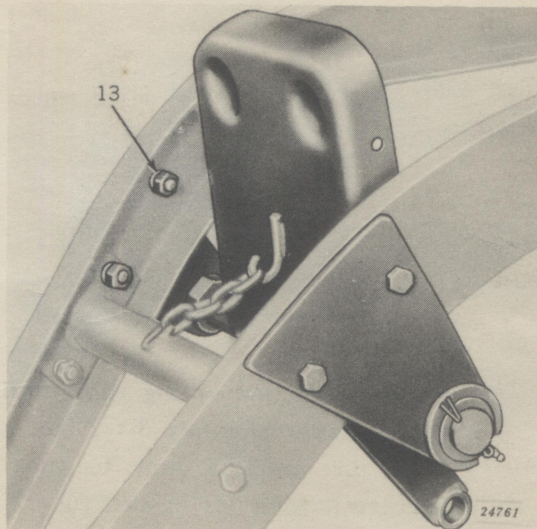
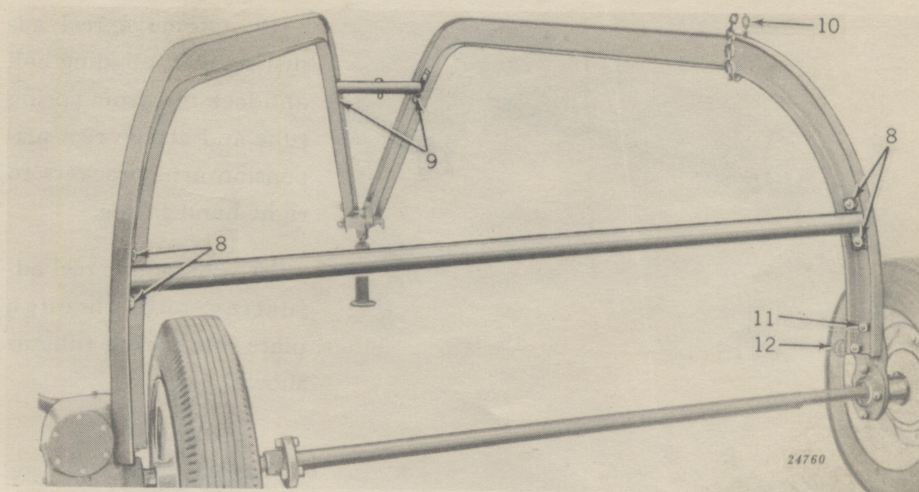
5. Loosen axle aligning bolt.

6. Assemble right-hand frame to right-hand wheel bearing bracket. Leave nuts loose.

7. Attach hitch and jack stand to main frame.







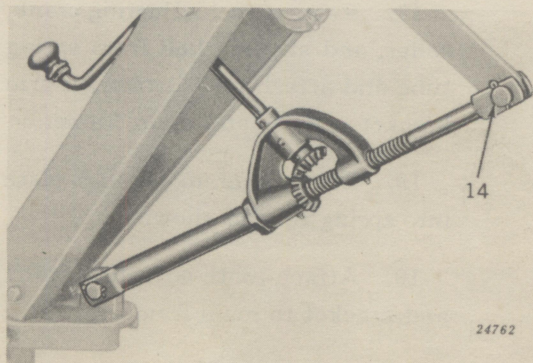
8. Attach rear tie bar with four bolts.

9. Attach front tie bar with two bolts.

10. Align axle by lifting right-hand side of the rake so wheel is off floor.

11. Tighten bolts through frame and right-hand wheel bearing brackets.

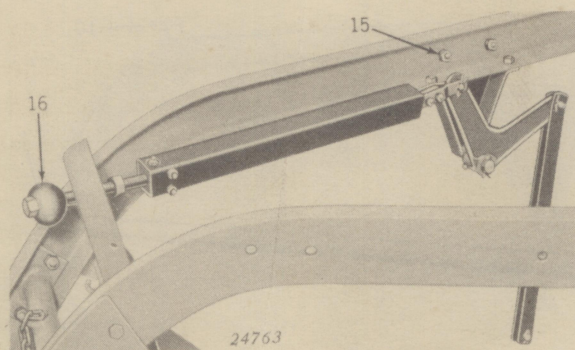
12. Tighten axle aligning bolt and locking nut.



13. Attach lift alignment plate to main frame with four bolts. (If rake is to be equipped with Powr-Trol, connect Powr-Trol transport chain to lift alignment plate.)

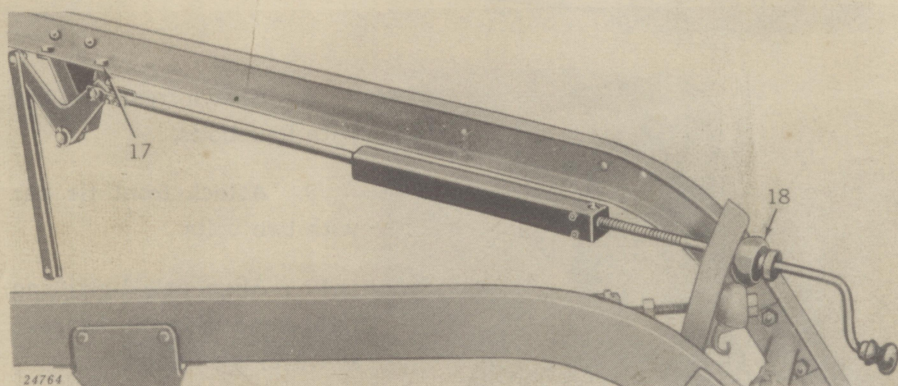
14. Assemble hand lift crank to hitch and lift alignment plate with two pins. Insert cotter pins.





15. Remove reel adjusting bolt, aligning ball and lock nut from spring tube and attach reel suspension arm brackets to right-hand frame.

16. Assemble reel adjusting bolt through plate into spring tube as shown.

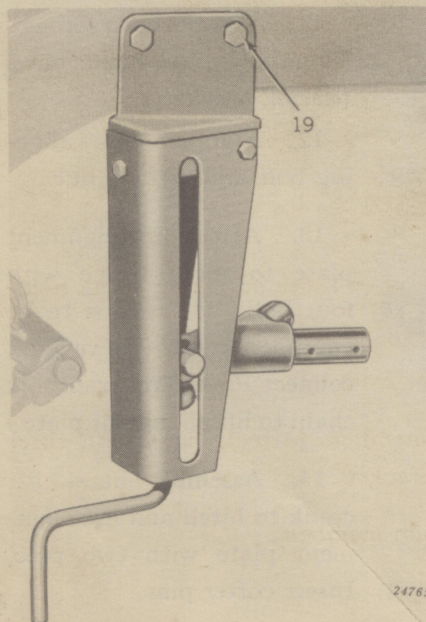


Turn bolt into spring tube until there is approximately 3-1/2 inches from the head of bolt to tube. Tighten locking nut against tube.

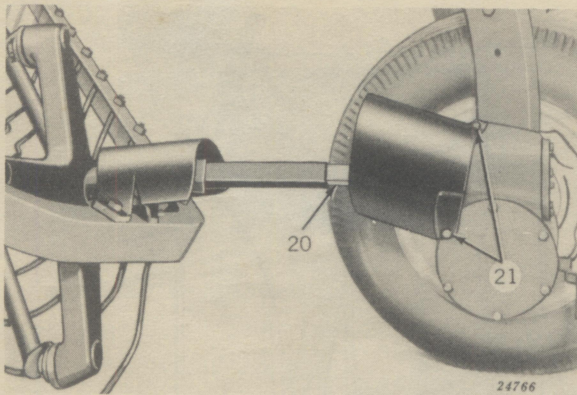
17. Remove reel adjusting crank, collar, and aligning ball from spring tube and attach reel suspension arm bracket to left-hand main frame.

18. Assemble crank through plate into spring tube as shown.

19. Attach tooth adjusting crank and bracket to main frame.

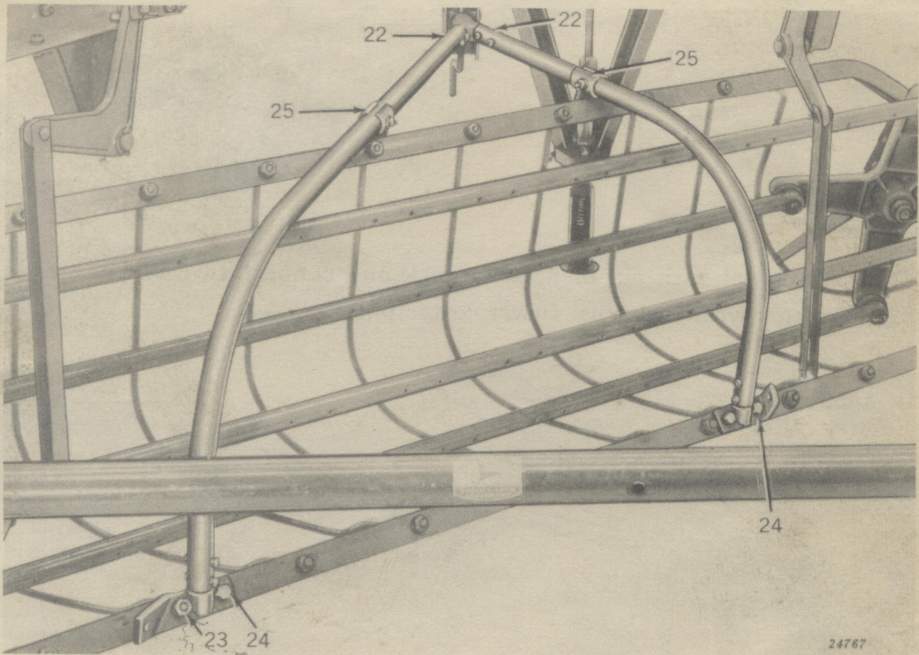






20. Place reel under frame of rake and connect shafts of universal joint.

21. Attach shield to gear case.



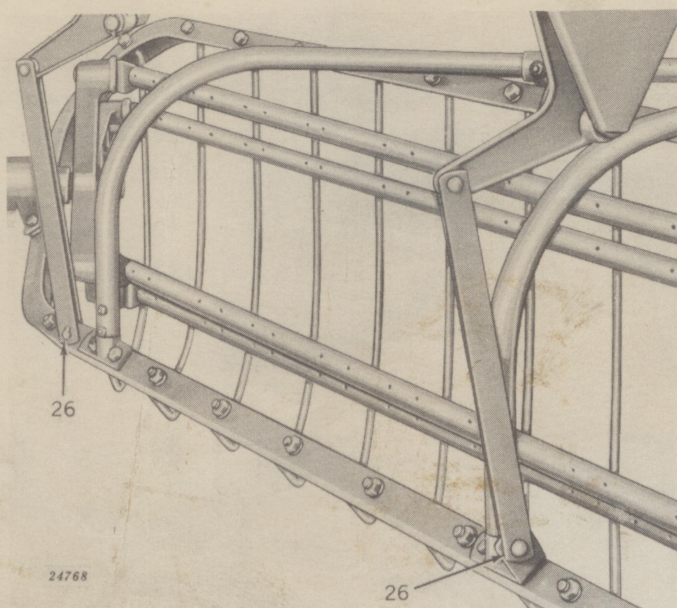
22. Attach suspension members to joint in tooth adjusting crank housing.

23. Remove nut from second stripper from left.

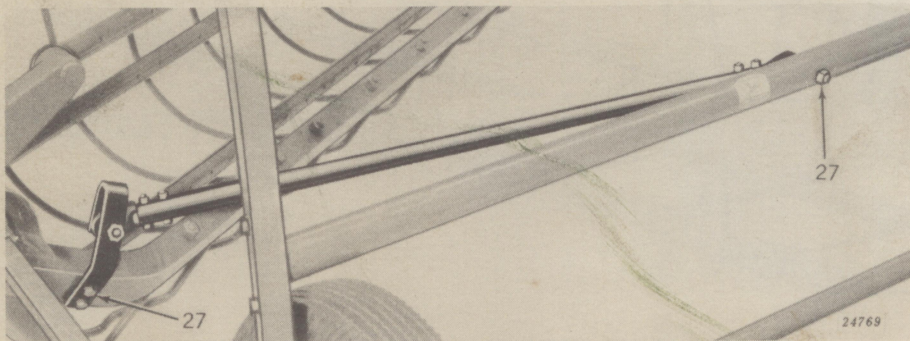
24. Attach rear end of suspension members to reel frame with three bolts. Replace nut on stripper through bracket.

25. Bolt reel to brackets on suspension members.



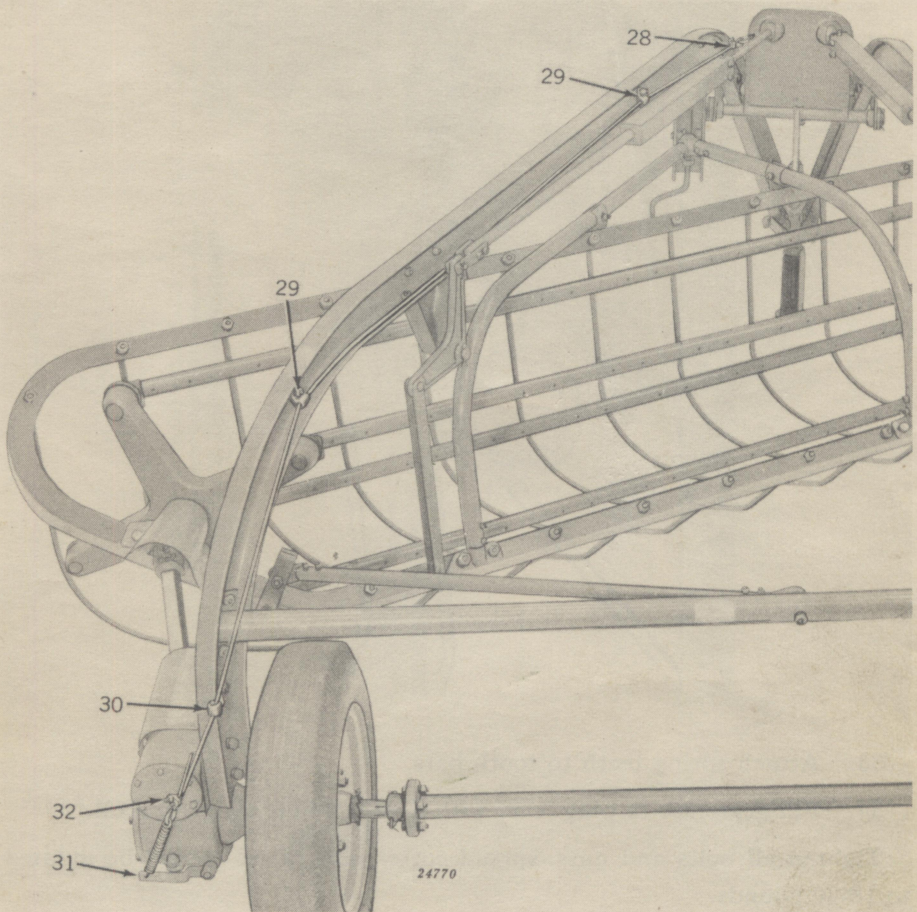


26. Lift reel with aid of hoist or jack and connect two hanger straps to reel frame with two pins. Insert cotter pins.



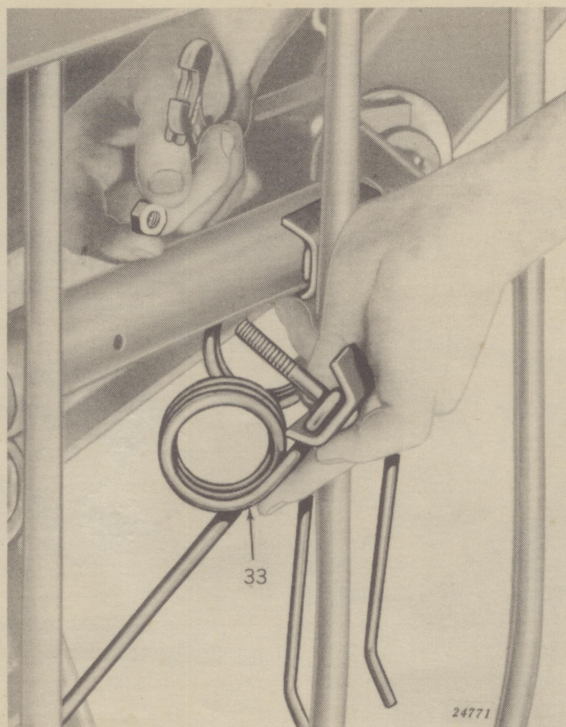
27. Attach reel tie bar to reel frame and rear tie bar.





28. Attach cable hook to lift alignment plate.
29. Bolt two front cable guides to inside of left-hand main frame.
30. Bolt rear cable guide to frame.
31. Attach spring to clutch shifting arm.
32. Raise the reel, loosen cable clamp. Extend the spring one inch by pulling cable tight. Be sure reel is out of gear. Tighten cable clamp.





33. Attach spring teeth to tooth bars.

34. Fill gear case to plug level with S.A.E. 140 transmission oil.

Tighten all bolts and nuts, spread cotter pins. Tires should be inflated to 18-20 pounds.

Level reel with reel adjusting crank.



## USING THE PARTS LIST

### Exploded Views.

Parts are shown in their proper relation to each other in exploded views. This makes the identification of parts simple and easy.

### Key Numbers.

Each part in an exploded view has a key number which is used only as a guide to find the part number, description, and quantity used in the list which follows each exploded view. As this key number is not a part number, *do not use it when ordering parts.*

### Quantity.

Quantities are listed except when only one part is used. Quantities listed are for the one illustration only and do not refer to the complete machine.

### Hardware.

All hardware items, such as cap screws, bolts, nuts and lock washers, are shown in their relative position. If more than one piece of hardware of the same size is used to attach any one unit, only one piece is shown. The descriptive list indicates the total number used.

### Index.

Consult the index at the beginning of the parts list to locate the unit you want.

## HOW TO ORDER PARTS

When purchasing parts, give your John Deere dealer the following information:

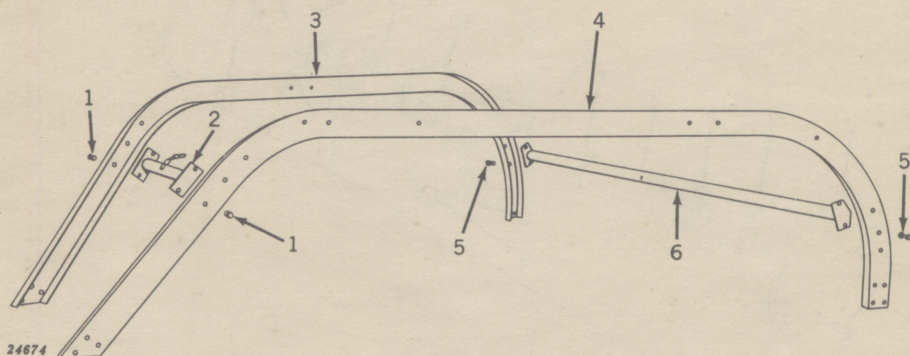
- a. Model number of your machine.
- b. Part number, description, and quantity desired of each part ordered. This is especially important when ordering by mail or telephone.
- c. Where part numbers are not given, as in the case of some hardware, order by size and description.
- d. When ordering by mail or telephone, give complete shipping instructions.



## INDEX TO PARTS LIST

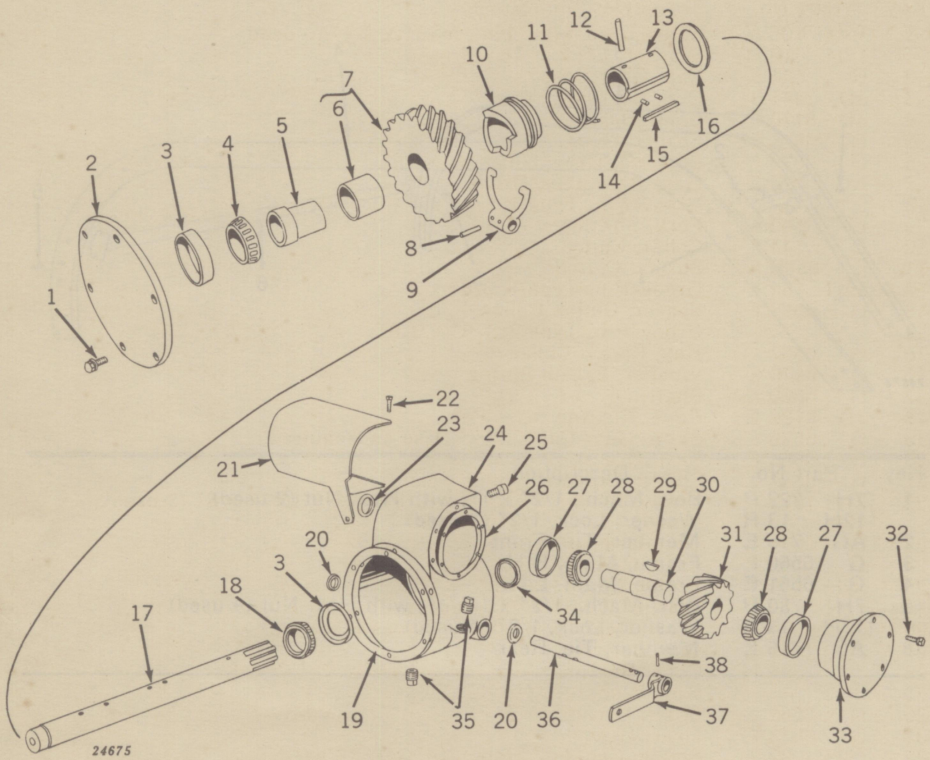
	<i>Page</i>
Arm, Reel Suspension.....	34
Bar, Tooth.....	39
Bolt, Reel Adjusting.....	31
Cable, Clutch.....	41
Case, Gear.....	24-25
Clutch Cable.....	41
Crank, Hand Lift.....	30
Crank, Reel Adjusting.....	32
Crank, Tooth Adjusting.....	33
Frame, Main.....	23
Frame, Reel.....	36
Gear Case.....	24-25
Hand Lift Crank.....	30
Hitch and Jack Stand.....	28
Jack Stand and Hitch.....	28
Joint, Universal.....	35
Lift Alignment Plate.....	29
Main Frame.....	23
Plate, Lift Alignment.....	29
Reel Adjusting Bolt.....	31
Reel Adjusting Crank.....	32
Reel End, Front.....	38
Reel End, Rear.....	37
Reel Frame.....	36
Reel Suspension Arm.....	34
Reel Tie Bar.....	40
Tie Bar, Reel.....	40
Tooth Adjusting Crank.....	33
Tooth Bar.....	39
Universal Joint.....	35
Wheel, Left.....	26
Wheel, Right.....	27





Key	Part No.	Description
1	(7H 722 R 12H 13 R	Bolt, Mach., 1/2" x 1", with Hex. Nut (2 used) Washer, Lock, 1/2" (2 used)
2	AG 715 E	Member, Tie, Front
3	G 6560 E	Frame, Main, R.H.
4	G 6561 E	Frame, Main, L.H.
5	(7H 730 R 12H 13 R	Bolt, Mach., 1/2" x 1-1/4", with Hex. Nut (4 used) Washer, Lock, 1/2" (4 used)
6	AG 716 E	Member, Tie, Rear

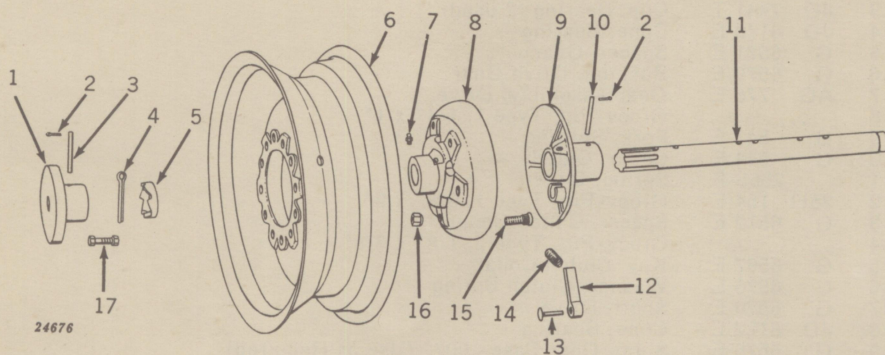






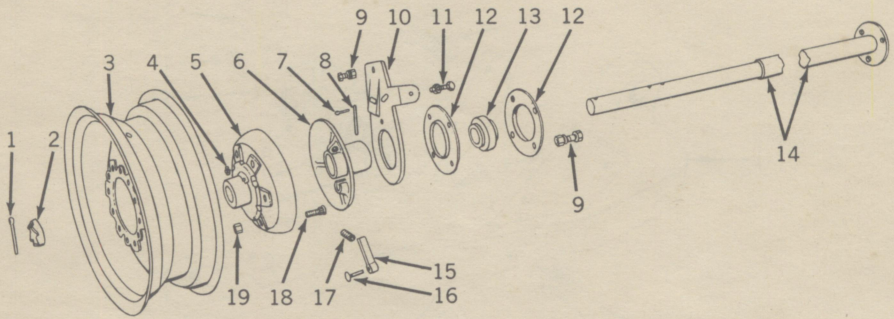
Key	Part No.	Description
1	(19H 105 R	Screw, Cap, Hex. Hd., 5/16" x 3/4" (6 used)
	(12H 10 R	Washer, Lock, 5/16" (6 used)
2	G 541 E	Cap, Gear Case
3	JD 7441 T	Cup, Bearing (2 used)
4	JD 8170 E	Cone, Bearing
5	G 6571 E	Spacer, Gear
6	G 6579 E	Bushing, Drive Gear
7	AG 775 E	Gear Assembly, Drive
8	.....	Groov-Pin, Type 1, 1/4" x 1"
9	G 543 E	Fork, Shifting
10	G 544 E	Collar, Clutch
11	256S E	Spring, Clutch
12	25H 154 E	Groov-Pin, Type 1, 3/8" x 2"
13	G 6572 E	Spacer, Clutch Collar
14	.....	Groov-Pin, Type 2, 1/8" x 3/8"
15	G 6567 E	Key, Clutch Collar
16	G 6576 E	Washer, Clutch Spring
17	G 6570 E	Shaft, Drive
18	JD 8122 E	Cone, Bearing
19	G 6575 E	Shim, Gear Case, .007" (Use as Required)
20	G 6663 E	Seal, Grease (2 used)
21	G 6641 E	Shield, Universal Joint, Rear
22	(21H 1012 E	Screw, Mach., Truss Head, Plated, 3/16" x 3/8" (3 used)
	(12H 13 R	Washer, Lock, 1/2" (3 used)
23	G 6664 E	Seal, Grease
24	G 542 E	Case, Gear
25	(19H 436 T	Screw, Cap, Hex. Hd., 1/2" x 1" (4 used)
	(12H 13 R	Washer, Lock, 1/2" (4 used)
26	G 6574 E	Shim, Gear Case, .007" (Use as Required)
27	JD 7449 E	Cup, Bearing
28	JD 7388 H	Cone, Bearing
29	.....	Key, Woodruff, No. 16
30	G 6569 E	Shaft, Driven
31	G 6573 E	Gear, Driven
32	(19H 32 T	Screw, Cap, Hex. Hd., 1/4" x 1" (6 used)
	(12H 9 R	Washer, Lock, 1/4" (6 used)
33	G 540 E	Cap, Gear Case
34	G 6665 E	Seal, Grease
35	15H 237 R	Plug, Pipe, Drain (2 used)
36	G 6568 E	Shaft, Clutch
37	AG 717 E	Lever, Shifting
38	25H 97 R	Groov-Pin, Type 1, 1/4" x 1-1/4" (2 used)





Key	Part No.		Description
1	G	538 E	Flange, Attaching
2	11H	39 R	Pin, Cotter, 1/8" x 3/4" (6 used)
3	G	6690 E	Pin
4	11H	120 H	Pin, Cotter, 1/4" x 2-1/2"
5	G	537 E	Washer, Adjustment
6	JD	894 M	Wheel
7	JD	7759	Fitting, Grease, Straight, 1/8"
8	G	536 E	Hub, Wheel
9	G	539 E	Plate, Ratchet
10	G	6680 E	Pin (2 used)
11	G	6570 E	Shaft, Gear Case
12	A	1540 E	Pawl, Ratchet
13	16H	731 A	Rivet, Wagon Box Head, 1/4" x 1-3/8"
14		112S E	Spring, Ratchet
15	C	2209 E	Bolt, Wheel (6 used)
16	C	2210 E	Nut, Wheel (6 used)
17	(7H	771 R	Bolt, Mach., 1/2" x 1-3/4", with Hex. Nut (3 used)
	(12H	13 R	Washer, Lock, 1/2" (3 used)

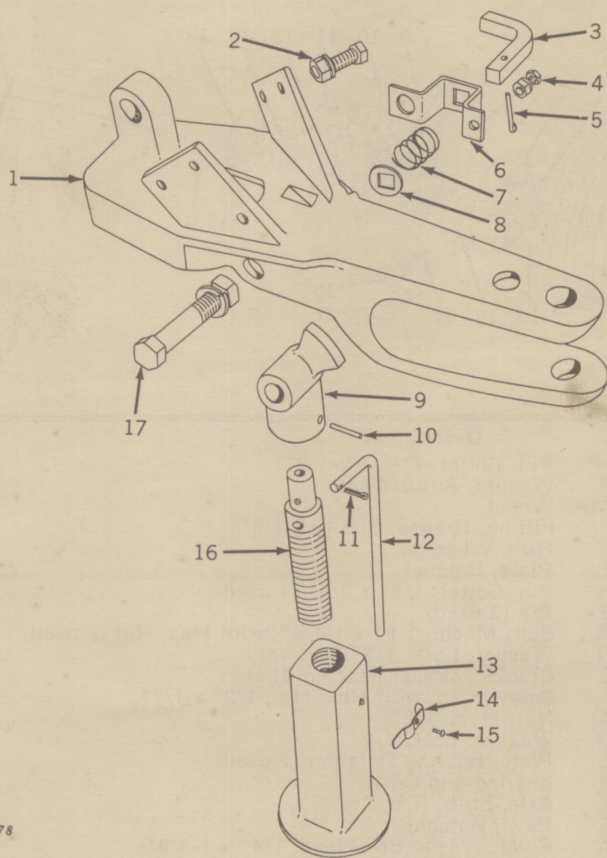




24677

Key	Part No.	Description
1	11H 120 H	Pin, Cotter, 1/4" x 2-1/2"
2	G 537 E	Washer, Adjustment
3	JD 894 M	Wheel
4	JD 7759	Fitting, Grease, Straight, 1/8"
5	G 536 E	Hub, Wheel
6	G 539 E	Plate, Ratchet
7	11H 39 R	Pin, Cotter, 1/8" x 3/4" (4 used)
8	G 6680 E	Pin (2 used)
9	(7H 730 R	Bolt, Mach., 1/2" x 1-1/4", with Hex. Nut (7 used)
	(12H 13 R	Washer, Lock, 1/2" (7 used)
10	G 535 E	Bracket, Wheel Bearing, R.H.
11	.....	Screw, Cap, with Hex. Hd., 1/2" x 1/2"
	(14H 102 A	Nut, Hex., 1/2"
	(12H 13 R	Washer, Lock, 1/2"
12	G 6661 E	Plate, Bearing Retainer (2 used)
13	G 6660 E	Bearing and Collar
14	AG 718 E	Axe, Stub, R.H.
15	A 1540 E	Pawl, Ratchet
16	16H 731 A	Rivet, Wagon Box Head, 1/4" x 1-3/8"
17	112S E	Spring, Ratchet
18	C 2209 E	Bolt, Wheel (6 used)
19	C 2210 E	Nut, Wheel (6 used)





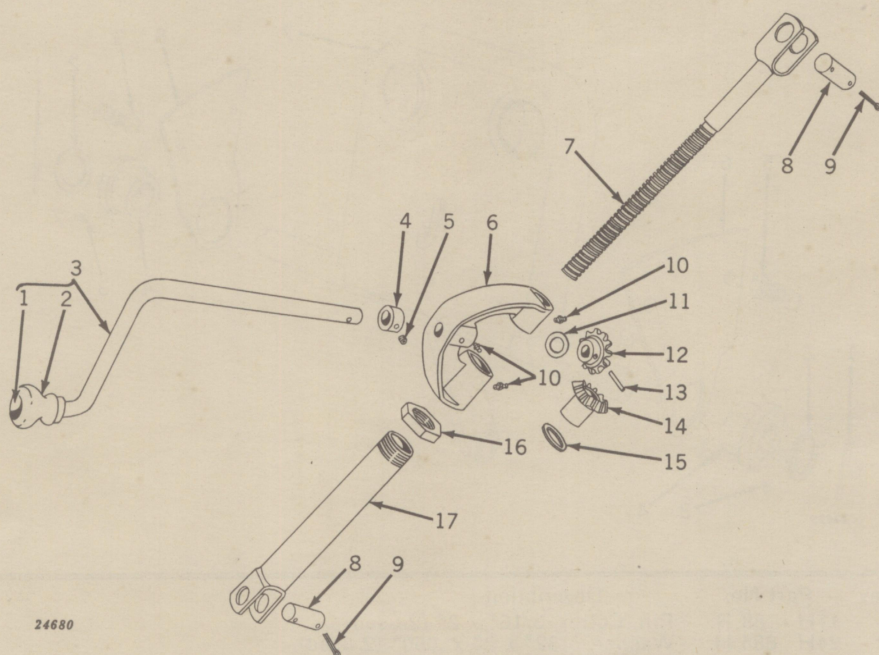
24678

Key	Part No.	Description
1	G 534 E	Hitch
2	(7H 741 R 12H 13 R)	Bolt, Mach., 1/2" x 1-1/2", with Hex. Nut (6 used) Washer, Lock, 1/2" (6 used)
3	G 6638 E	Pin, Latch
4	(7H 319 H 12H 11 R)	Bolt, Mach., 3/8" x 1", with Hex. Nut Washer, Lock, 3/8"
5	11H 80 R	Pin, Cotter, 3/16" x 1"
6	G 6639 E	Housing, Spring
7	258S E	Spring, Latch
8	24H 718 M	Washer, Square Hole, 21/32" x 1-1/4" x .060"
9	G 557 E	Knuckle, Jack Stand
10	.....	Groov-Pin, Type 5, 3/16" x 1-1/4"
11	11H 41 R	Pin, Cotter, 1/8" x 1"
12	G 6654 E	Handle, Jack Stand
13	AG 745 E	Base, Jack Stand
14	G 6655 E	Clip, Jack Stand
15	.....	Screw, Parker-Kalon Drive, Type U, No. 6, 3/8"
16	G 6637 E	Screw, Jack
17	(..... 12H 17 R)	Bolt, Mach., 3/4" x 4", with Hex. Nut Washer, Lock, 3/4"





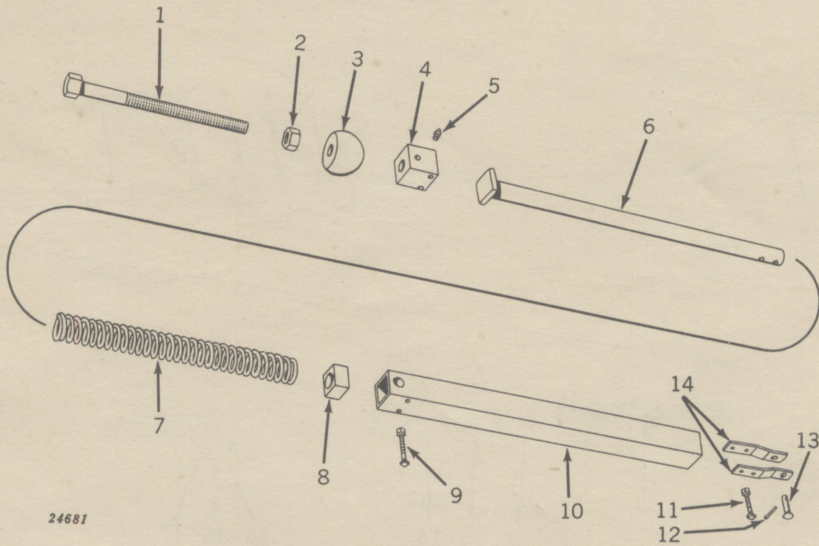




24680

Key	Part No.	Description
1	24H 779 H	Washer, 25/32" x 1-1/8" x .060"
2	G 559 E	Knob, Crank, Hand Lift
3	AG 744 E	Crank, Hand Lift
4	G 6651 E	Collar, Crank Shaft
5	22H 38 E	Screw, Set, Sq. Hd., Cup Point, 5/16" x 5/8"
6	G 564 E	Housing, Gear, Hand Lift
7	AG 742 E	Shaft, Screw, Hand Lift
8	G 6650 E	Pin, Hand Lift (2 used)
9	11H 82 R	Pin, Cotter, 3/16" x 1-1/4" (2 used)
10	JD 7797	Fitting, Grease, Straight, 1/4" (3 used)
11	24H 220 T	Washer, Drive Gear
12	G 562 E	Pinion, Drive
13	.....	Groov-Pin, 3/16" x 1-1/4"
14	G 563 E	Gear, Driven
15	G 6653 E	Spacer
16	G 6692 E	Nut, Lock, Standard Pipe, 1-1/4"
17	AG 743 E	Pipe, Lift Extension

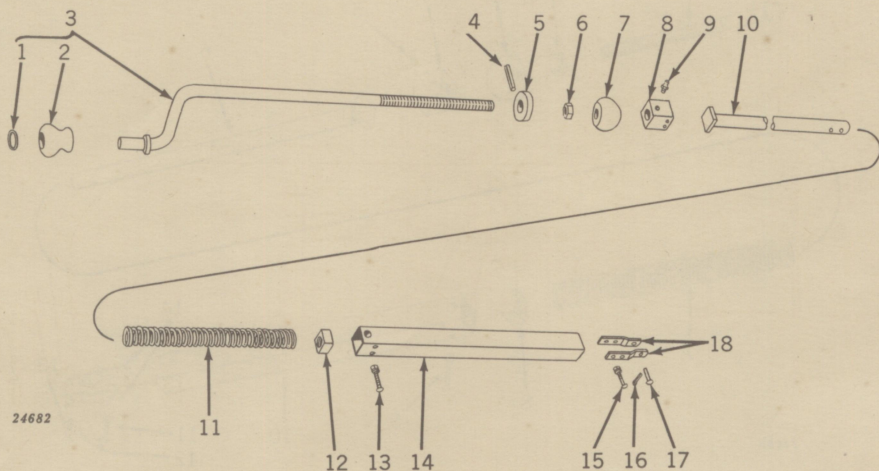




24681

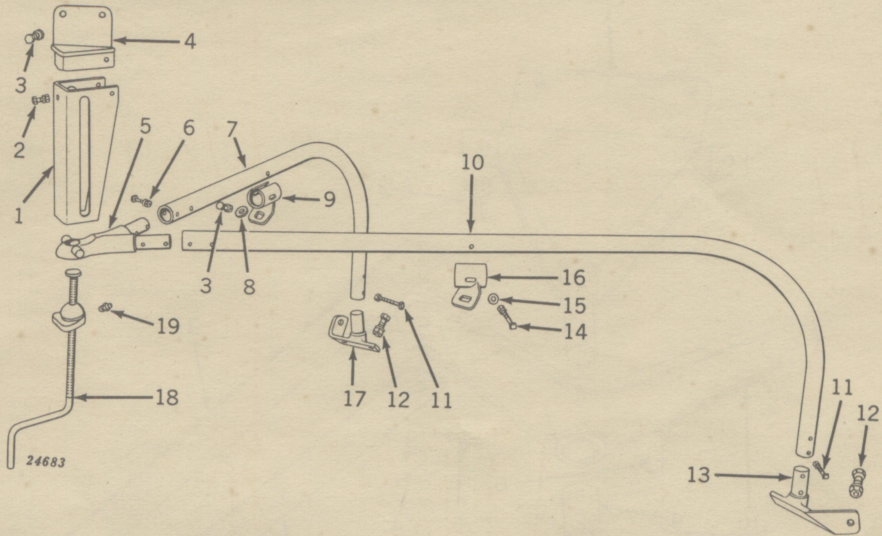
Key	Part No.	Description
1	8H 3451 E	Bolt, Mach., 3/4" x 9"
2	14H 110 H	Nut, Hex., 3/4"
3	G 555 E	Ball, Aligning
4	G 553 E	Block, Spring, Front
5	JD 7759	Fitting, Grease, Straight, 1/8"
6	AG 734 E	Rod, Spring, R.H.
7	193S E	Spring, Tube
8	G 554 E	Block, Spring, Rear
9	7H 231 H	Bolt, Mach., 5/16" x 2-1/2", with Hex. Nut (2 used)
10	12H 10 R	Washer, Lock, 5/16" (2 used)
11	AG 737 E	Tube, Spring
12	7H 213 B	Bolt, Mach., 5/16" x 2", with Hex. Nut (2 used)
13	12H 10 R	Washer, Lock, 5/16" (2 used)
14	11H 80 R	Pin, Cotter, 3/16" x 1"
	D 6043 E	Rivet, Drilled, 1/2" x 1-1/4"
	G 6635 E	End, Spring Rod (2 used)





Key	Part No.	Description
1	24H 879 H	Washer, 25/32" x 1-1/8" x .060"
2	G 559 E	Knob, Crank
3	AG 741 E	Crank, Reel Adjusting
4	.....	Groov-Pin, Type 1, 3/16" x 2"
5	G 6629 E	Collar, Reel Adjusting Crank
6	14H 110 H	Nut, Hex., 3/4"
7	G 555 E	Ball, Aligning
8	G 553 E	Block, Spring, Front
9	JD 7759	Fitting, Grease, Straight, 1/8"
10	AG 735 E	Rod, Spring, L.H.
11	193S E	Spring, Tube
12	G 554 E	Block, Spring, Rear
13	(7H 231 H 12H 10 R)	Bolt, Mach., 5/16" x 2-1/2", with Hex. Nut (2 used) Washer, Lock, 5/16" (2 used)
14	AG 737 E	Tube, Spring
15	(7H 213 B 12H 10 R)	Bolt, Mach., 5/16" x 2", with Hex. Nut (2 used) Washer, Lock, 5/16" (2 used)
16	11H 80 R	Pin, Cotter, 3/16" x 1"
17	D 6043 E	Rivet, Drilled
18	G 6635 E	End, Spring Rod (2 used)

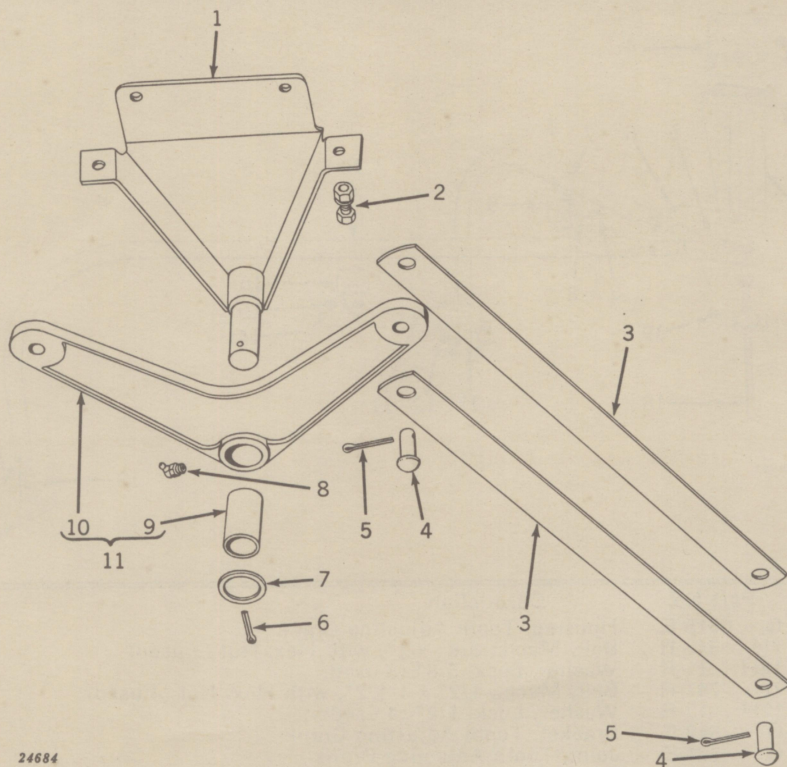




Key	Part No.	Description
1	G 6615 E	Housing, Tooth Adjusting Crank
2	(7H 319 R 12H 11 R)	Bolt, Mach., 3/8" x 1", with Hex. Nut (3 used) Washer, Lock, 3/8" (3 used)
3	(7H 741 R 12H 13 R)	Bolt, Mach., 1/2" x 1-1/2", with Hex. Nut (4 used) Washer, Lock, 1/2" (4 used)
4	G 549 E	Bracket, Tooth Adjusting Crank
5	G 571 E	Joint, Tooth Adjusting Crank
6	(7H 722 R 12H 10 R)	Bolt, Mach., 5/16" x 2-1/4", with Hex. Nut (4 used) Washer, Lock, 5/16" (4 used)
7	G 6684 E	Member, Suspension, R.H.
8	24H 187 E	Washer, 17/32" x 1-1/4" x .060" (2 used)
9	G 570 E	Bracket, R.H.
10	G 6685 E	Member, Suspension, L.H.
11	(2H 222 H 12H 10 R)	Bolt, Cge., 5/16" x 2-1/4", with Hex. Nut (4 used) Washer, Lock, 5/16" (4 used)
12	(8H 912 R 12H 15 R)	Bolt, Mach., 5/8" x 1-1/2", with Hex. Nut (4 used) Washer, Lock, 5/8" (4 used)
13	G 567 E	Clip, L.H.
14	(7H 428 R 12H 11 R)	Bolt, Mach., 3/8" x 2-3/4", with Hex. Nut (2 used) Washer, Lock, 3/8" (2 used)
15	24H 157 H	Washer, 1-3/32" x 1" x .060" (2 used)
16	G 569 E	Bracket, L.H.
17	G 568 E	Clip, R.H.
18	AG 728 E	Crank, Tooth Adjusting
19	JD 7759	Fitting, Grease, Straight, 1/8"



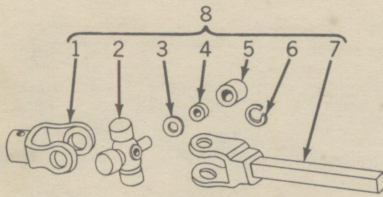
## REEL SUSPENSION ARM



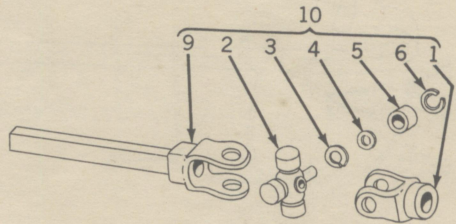
24684

Key	Part No.	Description
1	AG 731 E	Support, Reel Suspension (2 used)
2	7H 319 R	Bolt, Mach., 3/8" x 1", with Hex. Nut (8 used)
	12H 11 R	Washer, Lock, 3/8" (8 used)
3	G 6631 E	Arm, Reel Suspension (4 used)
4	D 6043 E	Pin, Drilled (4 used)
5	11H 80 R	Pin, Cotter, 3/16" x 1" (4 used)
6	11H 82 R	Pin, Cotter, 3/16" x 1-1/4" (2 used)
7	24H 252 H	Washer, 1-1/32" x 1-3/4" x .060" (2 used)
8	JD 7760	Fitting, Grease, 67-1/2", 1/8" (2 used)
9	BP 8588 E	Bushing, Reel Suspension (2 used)
10	G 558 E	Arm, Reel Suspension (2 used) Sub. AG738E
11	AG 738 E	Arm Assembly, Suspension (2 used)



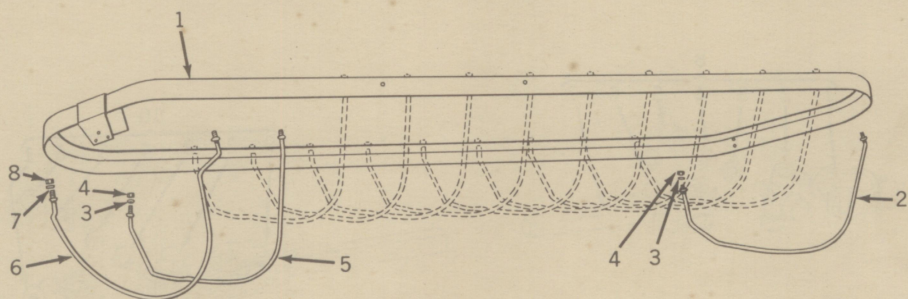


24685



Key	Part No.	Description
1	G 6691 E	Yoke, Threaded (2 used)
2	AJ 7329 H	Spider and Bearings (2 used)
3	J 13218 H	Washer, Grease (8 used)
4	J 13543 H	Retainer, Grease Washer (8 used)
5	J 13213 H	Bearing (8 used)
6	J 13214 H	Ring, Snap (8 used)
7	AG 784 E	Yoke and Shaft, Universal Joint
8	AG 782 E	Joint Assembly, Universal, Shaft
9	AG 785 E	Yoke and Tube, Universal Joint
10	AG 783 E	Joint Assembly, Universal, Tube

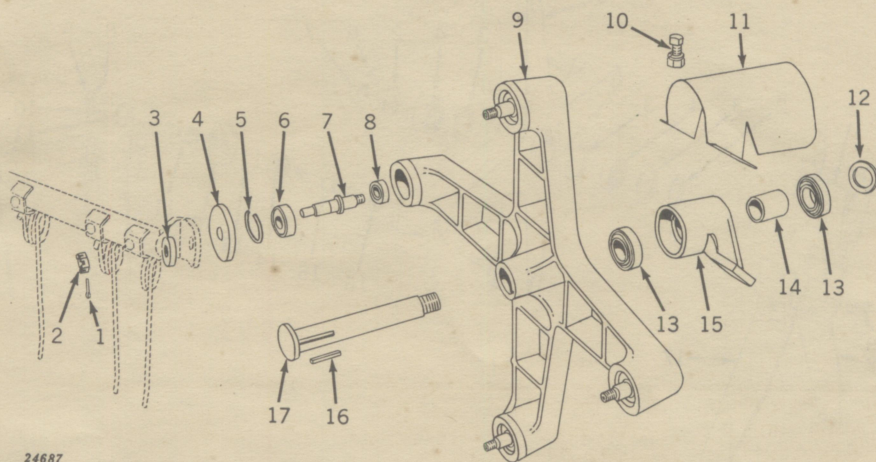




24686

Key	Part No.	Description
1	AG 725 E	Frame, Reel
2	G 6643 E	Stripper, Rear
3	12H 15 R	Washer, Lock, 5/8" (22 used)
4	14H 106 A	Nut, Hex., 5/8" (22 used)
5	G 6628 E	Stripper (10 used)
6	G 6657 E	Guard, Reel, Front
7	12H 17 R	Washer, Lock, 3/4" (2 used)
8	14H 110 A	Nut, Hex., 3/4" (2 used)

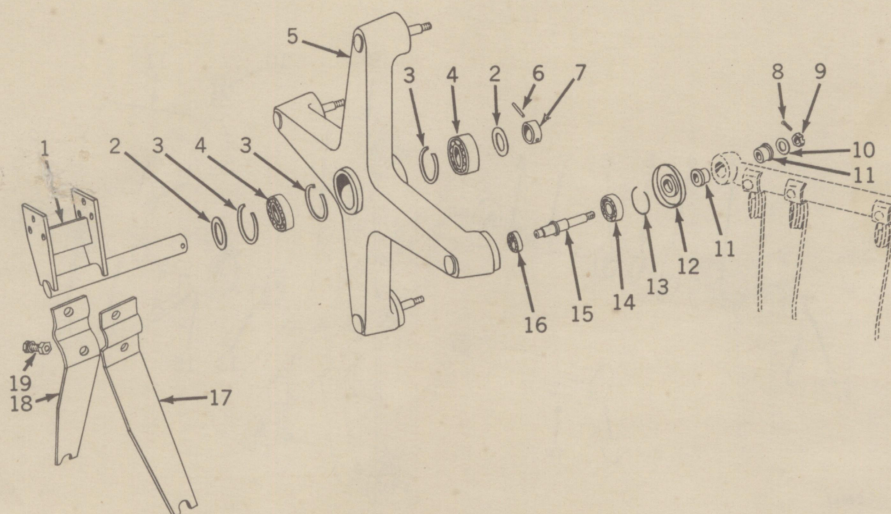




24687

Key	Part No.	Description
1	11H 60 T	Pin, Cotter, 5/32" x 1" (4 used)
2	.....	Nut, Hex., Light Slotted, 9/16" (4 used)
3	G 6596 E	Washer, Tooth Bar (4 used)
4	AG 722 E	Shield, Bearing (4 used)
5	G 6599 E	Ring, Retaining (4 used)
6	JD 8513 E	Bearing, Ball (4 used)
7	G 6591 E	Shaft, Tooth Bar (4 used)
8	JD 8511 T	Bearing, Ball (4 used)
9	G 547 E	Reel End, Rear
10	(8H 947 R	Bolt, Mach., 5/8" x 2", with Hex. Nut (2 used)
	(12H 15 R	Washer, Lock, 5/8" (2 used)
11	G 6642 E	Shield, Front Drive
12	24H 288 W	Washer, 1-7/32" x 2" x .060" (Use as Required)
13	JD 7188 H	Bearing, Ball (2 used)
14	G 6593 E	Spacer, Bearing
15	G 545 E	Housing, Bearing
16	G 6640 E	Key, Shaft
17	AG 724 E	Shaft, Rear Reel End

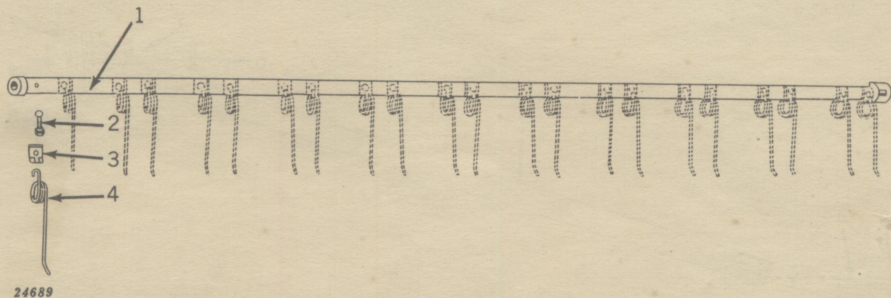




24688

Key	Part No.	Description
1	AG 721 E	Hanger, Reel
2	24H 288 W	Washer, 17/32" x 2" x .060" (Use as Required)
3	G 6600 E	Ring, Retaining, Front Reel End (3 used)
4	JD 7188 H	Bearing, Ball (2 used)
5	G 546 E	Reel End, Front
6	25H 1160 T	Groov-Pin, Type 1, 1/4" x 1-5/8"
7	G 6598 E	Collar, Front Spindle
8	11H 60 T	Pin, Cotter, 5/32" x 1" (4 used)
9	.....	Nut, Hex., Light Slotted, 9/16" (4 used)
10	G 6597 E	Washer (4 used)
11	G 6601 E	Bushing, Tooth Bar (8 used)
12	AG 723 E	Shield, Bearing, Front Reel End (4 used)
13	G 6599 E	Ring, Retaining (4 used)
14	JD 8513 E	Bearing, Ball (4 used)
15	G 6592 E	Shaft, Tooth Bar (4 used)
16	JD 8511 T	Bearing, Ball (4 used)
17	G 6659 E	Brace, Front Reel Guard, L.H.
18	G 6658 E	Brace, Front Reel Guard, R.H.
19	(7H 730 N	Bolt, Mach., 1/2" x 1-1/4", with Hex. Nut (2 used)
	(12H 13 R	Washer, Lock, 1/2" (2 used)

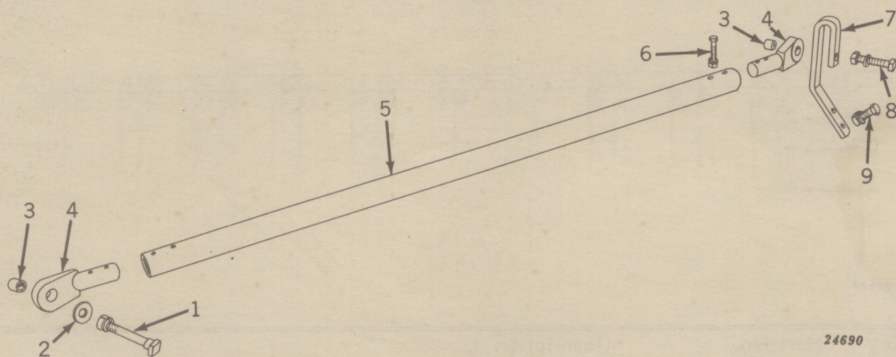




24689

Key	Part No.	Description
1	AG 720 E	Bar, Tooth (4 used)
2	2H 944 E	Bolt, Cge., 5/16" x 2-1/2" (88 used)
	14H 93 B	Nut, Hex., 5/16" (88 used)
	12H 10 R	Washer, Lock, 5/16" (88 used)
3	G 6594 E	Clip, Tooth Mounting (88 used)
4	257S E	Tooth, Spring (88 used)





24690

Key	Part No.	Description
1	(7H 911 R 12H 13 R)	Bolt, Mach., 1/2" x 3-3/4", with Hex. Nut Washer, Lock, 1/2"
2	24H 189 H	Washer, 17/32" x 1-1/2" x .060"
3	G 6682 E	Spacer, Tie Bar (2 used)
4	G 572 E	Insert, Tie Bar (2 used)
5	G 6681 E	Bar, Tie
6	(7H 209 H 12H 10 R)	Bolt, Mach., 5/16" x 1-3/4", with Hex. Nut (4 used) Washer, Lock, 5/16" (4 used)
7	G 6683 E	Clip, Tie Bar
8	(7H 814 A 12H 13 R)	Bolt, Mach., 1/2" x 2-1/4", with Hex. Nut Washer, Lock, 1/2"
9	(7H 730 N 12H 13 R)	Bolt, Mach., 1/2" x 1-1/4", with Hex. Nut (2 used) Washer, Lock, 1/2" (2 used)

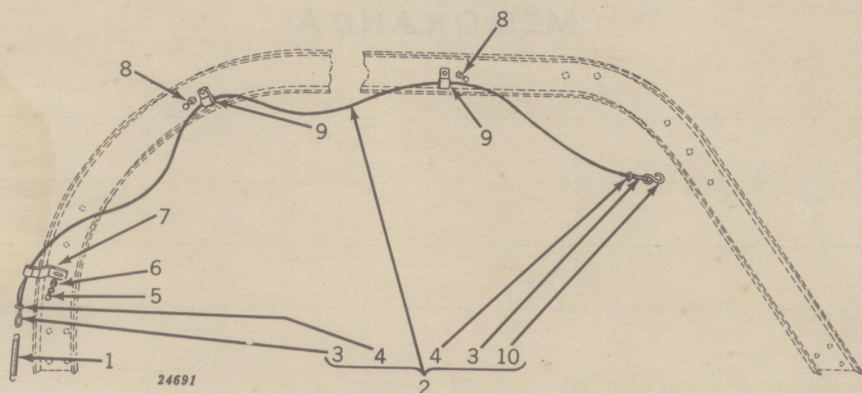


---

**MEMORANDA**

---





Key	Part No.	Description
1	106S E	Spring, Clutch
2	AG 771 E	Cable Assembly
3	G 6689 E	Thimble, Cable (2 used)
4	G 6688 E	Clamp, Cable (2 used)
5	(7H 730 R 12H 13 R)	Bolt, Mach., 1/2" x 1-1/4", with Hex. Nut Washer, Lock, 1/2"
6	24H 187 E	Washer, 17/32" x 1-1/4" x .060"
7	G 561 E	Guide, Cable, Rear
8	(7H 319 R 12H 11 R)	Bolt, Mach., 3/8" x 1", with Hex. Nut (2 used) Washer, Lock, 3/8" (2 used)
9	G 560 E	Guide, Cable (2 used)
10	G 6686 E	Hook, Cable



**MEMORANDA**



FOR GENUINE JOHN DEERE



PARTS

AND DEPENDABLE

SERVICE



*Go to your*  
**JOHN DEERE DEALER**

WHEN you need new parts for your John Deere equipment, always *insist on genuine John Deere parts*. They are made from the same patterns, of the same high-quality materials as the original parts. They will save you money because they fit properly, wear better, last longer and maintain the high quality of your equipment throughout its long working life.

You'll also find it pays to take advantage of the facilities offered by your John Deere dealer when you need special service for your John Deere equipment. He has *trained mechanics* who know your equipment best. He has *special equipment* for doing special work efficiently and economically. He will give you complete satisfaction on any work necessary to keep your equipment in A-1 condition.

**GENUINE JOHN DEERE PARTS FIT BETTER,  
LAST LONGER, AND DUPLICATE ORIGINALS.  
YOUR JOHN DEERE DEALER HAS TRAINED  
MECHANICS WHO KNOW YOUR EQUIPMENT**





## Farm Accidents Can Be Prevented *with Your Help*

**N**O accident prevention program can be successful without the whole-hearted cooperation of the person who is directly responsible for the operation of equipment.

To read accident reports from all over the Country is to be convinced that a large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the harvest field, or in the industrial plant, can be safer than the man who is at the controls. If farm accidents are to be prevented—and they can be prevented—it will be done by the operators who accept a full measure of their responsibility.

It is true that the designer, the manufacturer, the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that "*the best kind of a safety device is a careful operator.*" We ask you to be that kind of an operator.

**NATIONAL SAFETY COUNCIL**



# JOHN DEERE

## QUALITY EQUIPMENT

for your farming operations

**TRACTORS:** Standard-tread, general-purpose and orchard wheel-type tractors in many sizes and types; a light track-type tractor.

**PLOWS:** All sizes and types, moldboard and disk, including integral moldboard and disk types for John Deere general-purpose tractors. Middlebreakers. Disk tillers in all sizes. Plow-sole fertilizer attachment for plows.

**LISTERS:** One-, two-, and three-row for cotton, corn, and other crops. Integral middlebreakers and bedders and bedder planters for John Deere general-purpose tractors.

**HARROWS:** Single- and double-action disk types, drawn and integral. Offset disk harrows for orchard, vineyard, and cover-crop work. Spike-tooth harrows, spring-tooth harrows, and spring-tooth weed destroyers.

**GRAIN DRILLS:** Tractor- and horse-drawn grain drills in a size and type for every seeding job. Plain drills, fertilizer-grain drills, press drills, plow press drills, deep-furrow drills, and grass seed drills available. Adjustable-gate fluted force-feeds or double-run feeds. Choice of furrow openers. Fertilizer and grass seed attachments available. Lime and fertilizer distributors. Seeding attachments for disk tillers.

**PLANTERS:** Two- and four-row for corn, two-row for cotton, peanuts, and other crops. Multi-row planters for beets, beans, and other narrow-row crops with or without fertilizer attachment. One-, two-, and four-row planting and fertilizing attachments for cultivators. Transplanter units.

**POTATO MACHINERY:** One- and two-row planters with or without fertilizer attachment. One- and two-row tractor-driven diggers. Hoe and hilling attachment.

**CULTIVATORS:** One-, two-, four-, and six-row for flat-planted crops; one-, two-, and four-row for listed crops. Field and orchard cultivators with stiff or spring teeth. Beet and bean cultivators. Rotary hoes. Rod weeders.

**DUSTERS:** For cotton, corn, and vegetables.

**HAY MACHINERY:** Power-driven mowers, tractor-drawn mower, and enclosed-gear horse mowers. Side-delivery rakes, hay loaders, sweep rakes, sulky rakes, automatic pickup baler, hay choppers.

**HARVESTING MACHINERY:** Self-propelled combines; pull-type combines in 6- to 20-foot sizes; hillside combines. Grain binders, corn binders. Windrowers. Power-driven one- and two-row corn pickers. Ensilage harvesters; blowers. Bean harvesters. Peanut pullers. Cotton harvesters.

**GRAIN ELEVATORS:** Portable, for ear corn and small grains, portable type for small grains only.

**HAMMER AND FEED MILLS:** Two types, five sizes to fit every need. Power and hand shellers.

**MANURE SPREADERS:** Horse-drawn and tractor-drawn. Also lime-spreading attachment. Manure loader.

**FARM WAGONS:** Rubber-tired gears. Wagon box.

**MISCELLANEOUS:** Deep tillage equipment, including panbreakers, subsoilers, ditchers, and chisel cultivators. Corrugators. Land levelers. Tire pumps. Integral and drawn tool carriers, brush rake, and dozer blade attachments for tool carriers. Stalk cutter.

JOHN DEERE  
GAVE TO THE WORLD THE STEEL PLOW  
IN 1837